

Pursuant to the authority vested in the State Hospital Review and Planning Council by Section 2803(2) of the Public Health Law, Section 708.5 of Article 2 of Subchapter C of Chapter V of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York, is hereby amended as follows to be effective upon filing and publication of notice of its adoption:

Section 708.5(I) Review Standards

(i) Trauma centers. (1) The standards of Chapter V of this Title shall be applicable to the extent that such standards relate to the service under review or to the physical location in which the service is being provided.

(2) The following general standards address the distribution of services and issues related to all hospitals that provide care to trauma patients:

(i) The designation of trauma centers will be planned on a regional basis, and will be based on an annual incidence of one severe/life-threatening case per thousand population.

(ii) All hospitals will have a written transfer agreement with a regional trauma center and an area trauma center (as appropriate) for the transfer of severely injured trauma patients. This transfer agreement shall include written guidelines for determining the basis for seeking consultation and arranging the transport of trauma patients.

(iii) A regional trauma system is based on the prompt delivery of the trauma patient to a designated trauma center. In large urban cities (more than one million population), the total prehospital time of transport to a trauma center (time from receipt of call to arrival at the hospital) should be within 30 minutes. Outside of large urban cities, the total prehospital time to a trauma center should be within 60 minutes. If the total prehospital time will exceed 60 minutes, then the patient should be treated initially at the nearest available hospital before being transported to a trauma center. The decision to transfer a patient to a trauma center is the responsibility of the physician in the initial receiving hospital. Trauma specialists are available at the designated trauma center to give consultative advice about patient management and the need for transfer. Physician to physician contact should occur before transfer as circumstances permit.

(iv) Once the decision to transfer has been made, it should be effected as soon as possible. Resuscitation and stabilization should begin at the referring hospital, realizing that the patient's problems may be such that true stabilization may only be possible at the regional trauma center.

(v) The mode of transportation used for transfer shall be determined based on time, medical interventions necessary for ongoing life support during transfer, and availability of resources. The receiving and accepting physicians must agree on who will assume responsibility for on-line medical control during transfer.

(vi) Each hospital within a region will have a written agreement to cooperate with a regional trauma center in a quality assurance program for the regional trauma system.

(vii) Each hospital within a region will participate in planning activities to incorporate its resources and capabilities into local and regional mass casualty and disaster plans.

(3) The following standards apply to regional trauma centers:

(i) The hospital has a designated trauma service with a general surgeon (board certified or board admissible in surgery with advanced training and experience in trauma care or with training and

experience equivalent to board preparation and advanced training and experience in trauma care) who is responsible for the multidisciplinary and interdepartmental coordination of trauma care.

(ii) The hospital has a pediatric trauma service pursuant to paragraph (5) of this subdivision or a written transfer agreement with a regional trauma center that has a pediatric trauma service.

(iii) There is an emergency department with a qualified emergency physician, who is a designated member of the trauma team, physically present in the emergency department 24 hours a day.

(iv) There is a general surgeon (board-certified or board-admissible or with separate equivalent training and experience) available in the hospital 24 hours a day. This requirement may be fulfilled by postgraduate trainees in their fifth or later years capable of assessing emergency situations. They must be capable of providing surgical treatment immediately and of providing control and surgical leadership for the care of the trauma patient. When post graduate trainees are used to fulfill this requirement, staff specialists must be on call and available within 20 minutes.

(v) There is a neurosurgeon (board-certified or board-admissible or with equivalent training and experience) available in the hospital 24 hours a day. This requirement may be fulfilled by an in-house neurosurgeon, surgeon, or a post graduate trainee in the fifth or later years who has special competence, as judged by the chief of neurosurgery and the hospital, in the care of patients with neural trauma, and who is capable of initiating measures directed toward stabilizing the patient and initiating diagnostic procedures. When non-neurosurgeons are used to fulfill this requirement, staff specialists must be on call and available within 30 minutes.

(vi) The following surgical specialties staffed by qualified specialists (board-certified or board-admissible or with equivalent training and experience) are available to the hospital within 30 minutes: cardiac or thoracic surgery; microsurgery; gynecologic surgery; hand surgery; maxillofacial or oral surgery (dental); orthopedic surgery; ophthalmic surgery; otorhinolaryngologic surgery; pediatric surgery; plastic surgery; and urologic surgery.

(vii) A specialist (board-certified or board-admissible or with equivalent training and experience) in anesthesiology is available in the hospital 24 hours a day. This requirement may be met by post graduate trainees in the fourth or later years. When post graduate trainees are used to fulfill this requirement, staff specialists are on call and available within 20 minutes.

(viii) The following nonsurgical specialists (board-certified or board-admissible or with equivalent training and experience) are available to the hospital within 30 minutes: cardiology; pulmonology; gastroenterology; hematology; infectious diseases; internal medicine; nephrology; neuroradiology; pathology; pediatrics; psychiatry; and radiology.

(ix) All physicians who are members of the trauma team shall have current certification in advanced cardiac life support (ACLS) and advanced trauma life support (ATLS) or have training and experience equivalent to ACLS and ATLS.

(x) All registered professional nurses who are members of the trauma team shall have current certification in advanced cardiac life support (ACLS) or have training and experience equivalent to ACLS.

(xi) There is an intensive care unit (ICU) for trauma patients with a physician on duty in the ICU 24 hours a day or immediately available in the hospital. (The physician on duty in the ICU is not the emergency department physician.)

(xii) The physician on duty in the ICU has special competence, as judged by the director of the trauma service and the hospital, in the care of trauma patients.

(xiii) The minimum ratio of registered professional nurses to trauma patients in the ICU is 1:2 on each shift.

(xiv) The following equipment is available to the ICU: airway control and ventilation devices; oxygen source with concentration controls; cardiac emergency cart; temporary transvenous pacemaker; electrocardiograph-oscilloscope-defibrillator; cardiac output monitoring; electronic pressure monitoring; mechanical ventilator-respirators; patient weighing devices; pulmonary function measuring devices; temperature control devices; drugs; intravenous fluids and supplies; and intracranial pressure monitoring devices.

(xv) There is a postanesthetic recovery room (a surgical intensive care unit is acceptable) with registered professional nurses available 24 hours a day and appropriate monitoring and resuscitation equipment available.

(xvi) In-house hemodialysis capability is available within two hours, 24 hours a day.

(xvii) There is either a designated burn center/unit available at the facility or a written transfer agreement with a designated burn center/unit.

(xviii) Comprehensive inpatient physical medicine and rehabilitation, spinal cord injury rehabilitation, and head injury rehabilitation programs are either available at the facility or there is a written transfer agreement with a designated provider for these services.

(xix) The following radiological capabilities are available at the facility: angiography of all types available 24 hours per day with 30 minutes maximum response time; sonography; nuclear scanning; and CT scanning available 24 hours per day with 30 minute maximum response time.

(xx) There is an operating room that is staffed in-house and is immediately available 24 hours a day.

(xxi) The operating room has the following equipment: operating microscope; thermal control equipment for patients and for blood; x-ray capability; all varieties of endoscopes; equipment for craniotomies; monitoring equipment; and autotransfusion capability.

(xxii) The following clinical laboratory services are available 24 hours a day: standard analyses of blood, urine and other body fluids; blood typing and cross matching; coagulation studies; comprehensive blood bank or access to a community central blood bank and adequate hospital storage facilities; blood gases and pH determinations; microbiology; and drug and alcohol screening.

(xxiii) There is an organized quality assurance program that includes: special audit for all trauma deaths; morbidity and mortality review; regular multidisciplinary trauma conferences including all members of the trauma team; medical/nursing audit; utilization review; tissue review; and review of prehospital and regional systems of trauma care.

(xxiv) The regional trauma center maintains a trauma registry with documentation of severity of injury (by trauma score, age, sex, injury severity score) the cause of the injury, and outcome (survival, length-of-stay), with a monthly review of statistics.

(xxv) Each regional trauma center has a 24-hour telephone physician consultation service with the authority to accept the transfer of trauma patients.

(xxvi) There is a program of public education for injury prevention in the home and industry, on the highways and athletic fields, standard first-aid, problems confronting public, medical profession, and hospitals regarding optimal care for the injured.

(xxvii) There is an active program of trauma research.

(xxviii) There are outreach programs and programs in continuing education provided by the regional trauma center for trauma center staff, community nurses, physicians, and allied health personnel.

(xxix) The regional trauma center shall have a written transfer agreement with all hospitals in the region. This transfer agreement will specify the scope of services provided by the receiving hospital and the transferring hospital.

(xxx) The regional trauma center shall establish field triage protocols and procedures with the prehospital providers in its service area which include the mechanism of injury and abnormal physiologic signs. Where there is an established regional emergency services system, the regional trauma center shall coordinate the establishment of field triage protocols with other participants in the regional system.

(4) The following standards apply to an area trauma center:

(i) The hospital has a designated trauma service with a general surgeon (board-certified or board-admissible in surgery with advanced training and experience in trauma care or with training and experience equivalent to board preparation and advanced training and experience in trauma care) who is responsible for the multidisciplinary and interdepartmental coordination of trauma care.

(ii) The hospital has a pediatric trauma service pursuant to paragraph (5) of this subdivision or a written transfer agreement with a regional or area trauma center that has a pediatric trauma service.

(iii) There is an emergency department with a qualified emergency physician, who is a designated member of the trauma team, physically present in the emergency department 24 hours a day.

(iv) The area trauma center shall ensure that a trauma surgeon is present in the emergency department at the time of the patient's arrival. When sufficient prior notification has not been possible, a designated member of the trauma team will immediately initiate the evaluation and resuscitation. Definitive surgical care must be instituted by the trauma surgeon in a timely manner that is consistent with established standards.

(v) The area trauma center shall ensure that a neurosurgeon (board-certified or board-admissible or with equivalent training and experience) is present in the emergency department at the time of the patient's arrival. When sufficient prior notification has not been possible, a surgeon or postgraduate trainee in the fifth or later years who has special competence, as judged by the chief of neurosurgery and the hospital, in the care of patients with neural trauma, shall initiate measures to stabilize the patient and initiate diagnostic procedures. Definitive neurosurgical care shall be instituted by the neurosurgeon in a timely manner that is consistent with established standards of neurosurgical care.

(vi) The following surgical specialties staffed by qualified specialists (board-certified or board-admissible or with equivalent training and experience) are available to the hospital within 30 minutes: cardiac or thoracic surgery; gynecologic surgery; ophthalmic surgery; maxillofacial or oral surgery (dental); orthopedic surgery; otorhinolaryngologic surgery; plastic surgery; and urologic surgery.

(vii) A specialist (board-certified or board-admissible or with equivalent training and experience) in anesthesiology is available in the hospital 24 hours a day. This requirement may be met by a certified nurse anesthetist (CRNA) capable of assessing emergency situations in trauma patients and of initiating and providing indicated treatment under the supervision of the operating surgeon. Under these conditions the staff anesthesiologist is on-call and available within 20 minutes.

(viii) The following nonsurgical specialists (board-certified or board-admissible or with equivalent training and experience) are available to the hospital within 30 minutes: cardiology; hematology; internal medicine; nephrology; pathology; pediatrics; and radiology.

(ix) All physicians who are members of the trauma team shall have current certification in advanced cardiac life support (ACLS) and advanced trauma life support (ATLS) or have training and experience equivalent to ACLS and ATLS.

(x) All registered professional nurses who are members of the trauma team shall have current certification in advanced cardiac life support (ACLS) or have training and experience equivalent to ACLS.

(xi) There is an intensive care unit (ICU) for trauma patients with a physician on duty in the ICU 24 hours a day or immediately available in the hospital. (The physician on duty in the ICU is not the emergency department physician.)

(xii) The physician on duty in the ICU is a postgraduate trainee in the second or later years who has special competence, as judged by the director of the trauma service and the hospital, in the care of trauma patients. When post graduate trainees are used to fulfill this requirement, staff specialists in critical care medicine must be on call and available within 30 minutes.

(xiii) The minimum ratio of registered professional nurses to trauma patients in the ICU is 1:2 on each shift.

(xiv) The following equipment is available to the ICU: airway control and ventilation devices; oxygen source with concentration controls; cardiac emergency cart; temporary transvenous pacemaker; electrocardiograph-oscilloscope-defibrillator; cardiac output monitoring; electronic pressure monitoring; mechanical ventilator-respirators; patient weighing devices; pulmonary function measuring devices; temperature control devices; drugs; intravenous fluids and supplies; and intracranial pressure monitoring devices.

(xv) There is a postanesthetic recovery room (a surgical intensive care unit is acceptable) with registered professional nurses available 24 hours a day and appropriate monitoring and resuscitation equipment available.

(xvi) In-house hemodialysis capability is available within two hours, 24 hours a day.

(xvii) There is either a designated burn center/unit available at the facility or a written transfer agreement with a designated burn center/unit.

(xviii) Comprehensive inpatient physical medicine and rehabilitation, spinal cord injury rehabilitation, and head injury rehabilitation are either available at the facility or there is a written transfer agreement with a designated provider of these services.

(xix) The following radiological capabilities are available at the facility: angiography of all types available 24 hours per day with 30 minute maximum response time; sonography; nuclear scanning; and CT scanning available 24 hours per day with 30 minute maximum response time.

(xx) There is an operating room that is staffed in-house and is immediately available 24 hours a day.

(xxi) The operating room has the following equipment: operating microscope; thermal control equipment for patients and for blood; x-ray capability; all varieties of endoscopes; equipment for craniotomies; monitoring equipment; and autotransfusion capability.

(xxii) The following clinical laboratory services are available 24 hours a day: standard analyses of blood, urine, and other body fluids; blood typing and cross matching; coagulation studies; comprehensive blood bank or access to a community central blood bank and adequate hospital storage facilities; blood gases and pH determinations; microbiology; and drug and alcohol screening.

(xxiii) There is an organized quality assurance program that includes special audit for all trauma deaths; morbidity and mortality review; regular multidisciplinary trauma conferences including all members of the trauma team; medical/nursing audit; utilization review; tissue review; and review of prehospital and regional systems of trauma care.

(xxiv) The area trauma center maintains a trauma registry with documentation of severity of injury (by trauma score, age, sex, injury severity score), the cause of the injury, and outcome (survival, length of stay), with a monthly review of statistics.

(xxv) Each area trauma center has a 24-hour telephone physician consultation service with the authority to accept the transfer of trauma patients.

(xxvi) There is a program of public education for injury prevention in the home and industry, on the highways and athletic fields; standard first-aid; problems confronting public, medical profession, and hospitals regarding optimal care for the injured.

(xxvii) The area trauma center shall have a written transfer agreement with the regional trauma center. This agreement will specify the scope of services provided by the receiving hospital and the transferring hospital.

(xxviii) The area trauma center shall establish field triage protocols and procedures with the prehospital providers in its service area which include the mechanism of injury and abnormal physiologic signs. Where there is an established regional emergency medical services system, the area trauma center shall coordinate the establishment of field triage protocols with other participants in the regional system.

(5) The following standards apply to pediatric trauma services:

(i) To be designated to receive pediatric trauma patients, regional trauma centers shall have a pediatric trauma service directed by a pediatric surgeon (board certified or board admissible in pediatric surgery or with training and experience equivalent to board preparation and with advanced training and experience in trauma care) who is responsible for the multidisciplinary and interdepartmental coordination of pediatric trauma care.

(ii) To be designated to receive pediatric trauma patients, an area trauma center shall have a pediatric trauma service directed by a pediatric surgeon (board certified or board admissible in pediatric surgery or with training and experience equivalent to board preparation and with advanced training and experience in trauma care) or a general surgeon (board certified or board admissible or with equivalent training and experience) with special interest and expertise in pediatric trauma.

(iii) The attending physicians in pediatric trauma shall be pediatric surgeons (board certified or board admissible or with equivalent training and experience) or general surgeons (board certified or board admissible or with equivalent training and experience) with special interest and expertise in pediatric trauma.

(iv) All senior physicians (attending or postgraduate trainees in their fifth or later years) and registered professional nurses who are members of the pediatric trauma team shall have current certification in pediatric advanced life support (PALS) or have training and experience equivalent to PALS.

(v) The anesthesiologist (and physicians from other services) on-call for pediatric trauma shall be experienced in the management of children. Whenever possible, these responsibilities shall be met by physicians with advanced training, certification, and/or experience in the pediatric branch of the (sub) specialty training, certification, and/or experience in the pediatric branch of the (sub) specialty.

(vi) All registered professional nurses who are members of the pediatric trauma team shall have had training (intramural or extramural) in the management of pediatric trauma patients.

(vii) Critically ill pediatric trauma patients shall be cared for by the pediatric trauma service in a properly equipped pediatric intensive care area staffed 24 hours a day by physicians and nurses credentialed by the hospital to manage pediatric intensive care.

(viii) The emergency department must be properly equipped for care of children and staffed 24 hours-a-day by physicians and registered professional nurses with expertise in pediatric resuscitation.